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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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27479	7590	12/01/2004	EXAMINER	
COCHRAN FREUND & YOUNG LLC 3555 STANFORD ROAD SUITE 230 FORT COLLINS, CO 80525			FISH, JAMIESON W	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/832,750

Applicant(s)

CHELEHMAL ET AL.

Examiner

Jamieson W. Fish

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "56" has been used to designate both Set Top Box and Up Converter Channel #M. Reference character "50" is used to designate Set Top Box in the specifications. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

3. Claim 2 is objected to because of the following informalities: on line 8, "said provider" is inconsistent with the specification. It is understood that the applicant intended to use a term consistent with the specifications such as "said cable system

user.” The claim will be evaluated with “said cable system user” in place of “said provider.” Appropriate correction is required.

4. Claim 9 is objected to because of the following informalities: for dependent claim 9 to be consistent with claim 8, “dates” on line 1 should be replaced with “data.” The claim has been evaluated as such. Appropriate correction is required.

5. Claim 16 is objected to because of the following informalities: the system described needs a part to perform the “up-converting.” It is understood that the claim is intended to read “up-converter that up-converts said...” and has been evaluated as such. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims **1-7,12-15 and 17**, are rejected under 35 U.S.C. 102(e) as being unpatentable over Son et al. (U.S. # 2002/0026645).

8. Regarding claim **1**, Son teaches a method of using a managed network (See Fig. 1 Stream Distribution Network 104 and Paragraphs 23-26) and a video cable system (See Fig 1. Cable Network 110 and Paragraph 47) to deliver video data on-demand comprising (See Paragraph 21 and 22): providing a listing of video data that is available

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from said content provider for selection by said cable system user (See Paragraph 49-50 and Fig. 4, EPG Server, EPG server provides an EPG which provides list of available video data); using a first transport mechanism that is compatible with said managed network to transmit said video data through said managed network to a cable system provider in response to a request by said cable system user (See Paragraph 46-47); converting said first transport mechanism to a second transport mechanism that is compatible with said video cable system (See Paragraph 38 and 46-47); transmitting said video data to said user through said video cable system using said second transport mechanism (See Paragraph 47).

9. Regarding claim 2, Son teaches the step of providing a list of video data further comprising: generating a request for said listing of video data that is transmitted from said cable system user through said cable to an internet service provider that is connected to said managed network (See Paragraphs 49-50 and 39); providing said listing of video data that is available from said content provider that is transmitted from said content provider through said managed network, said internet service provider and said cable to said cable system user (See Paragraph 41).

10. Regarding claim 3, Son teaches the method of claim 2 further comprising generating a request for a particular video data stream that is transmitted from said cable system user through said cable to an internet service provider that is connected to said managed network and said cable (See Paragraphs 39).

11. Regarding claim 4, Son teaches the method of claim 3 further comprising generating a confirmation signal (See Paragraph 39 Infrastructure manager

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checks/allows user request, sends a signal to caching server) and decoding information that is transmitted from said content provider to said cable system user through said managed network and said ISP provider to said cable (See Paragraph 43).

12. Regarding claim 5, Son teaches the method of claim 1 wherein said act of using a first transport mechanism to transmit said video data through said managed network to a cable system provider further comprises: using real time protocol as a transport mechanism in an IP managed network to transmit said video data through said IP managed network with at least a predetermined level of quality of service. (Paragraph 34-35).

13. Regarding claim 6, Son teaches the method of claim 1 wherein converting said first transport mechanism to a second transport mechanism comprises: converting an IP transport mechanism to an MPEG transport mechanism (See Paragraph 38 and 46).

14. Regarding claim 7, Son teaches the method of claim 5 wherein converting said first transport mechanism to a second transport mechanism comprises: converting an IP transport mechanism to an MPEG transport mechanism (See Paragraphs 38 and 46).

15. Regarding claim 12, Son teaches a system for delivering video data on-demand from a content provider to a cable system user coupled to a cable system comprising; a content server that provides a listing of video data available from said content provider (See Fig 1 Streaming Caching Server 102 and Paragraph 26); a managed network coupled to said content server that is capable of transmitting said video data using a first transport mechanism upon receiving a request from said cable system user to

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produce a plurality of first transport data streams (See Fig. 1 Stream distribution Network 104 and Paragraph 24); a translator that translates said first transport data streams to a plurality of second transport data streams on a second transport mechanism that is compatible with said cable system (See Fig. 1 Data Link Converter 126 and Paragraph 38).

16. Regarding claim **13**, Son teaches the first transport mechanism being an IP transport mechanism and said second transport mechanism being an MPEG transport mechanism (See Paragraph 46 and 47).

17. Regarding claim **14**, Son teaches the system of claim 12 further comprising: multiplexer that multiplexes said second transport data streams onto said second transport mechanism (See Paragraph 41).

18. Regarding claim **15**, Son teaches the system of claim 14 further comprising: digital modulator that digitally modulates said second transport data streams, that have been multiplexed onto said second transport mechanism, onto an rf carrier signal (See Paragraphs 37 and 41, QAM modulators). A QAM modulator is a digital modulator that digitally modulates a data stream onto an rf carrier signal.

19. Regarding claim **17**, Son teaches a method of delivering data on-demand from a content provider in response to a request from a user comprising: transmitting said data from said content provider to a managed IP network (See Paragraph 23); transmitting said data on an IP transport on said managed IP network with a predetermined quality of service to a cable service provider that is coupled to a plurality of cable users on a

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cable system (See Paragraph 35); converting said data on said IP transport to an MPEG transport that is compatible with said cable system (See Paragraphs 33).

20. Claims **10** and **11** are rejected under 35 U.S.C. 102(e) as being anticipated by Mimura et al. (US# 6,785,733).

21. Mimura teaches a method of translating a data stream suitable for transmission on a IP Transport mechanism to a data stream suitable for transmission on an MPEG transport mechanism: comprising separating timing data contained in said IP transport from content data (See Fig. 11 and Col. 11 lines 23-26); converting said timing data to adaptation information (See Fig 11 and Col. 11 lines 23-26); placing adaptation information in adaptation fields of said MPEG transport mechanism (See Fig. 11 and Col. 11 lines 23-26); combining said adaptation fields with corresponding content data (See Fig. 11 and Col. 11 lines 26-28 and Fig. 11).

22. Regarding claim **11**, Mimura teaches multiplexing adaptation fields and content data onto an MPEG transport mechanism (See Fig. 11 Col. 11 lines 19-30 and Col. 9 lines 45-48 adaptation field and content data multiplexed to PES).

Claim Rejections - 35 USC § 103

23. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

24. Claim **8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. in view of Mimura et al.

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25. Regarding claim 8, Son et al. teaches converting an IP transport mechanism to an MPEG transport mechanism (See Paragraphs 38 and 46). Son does not explicitly teach that conversion mechanism comprise: separating timing data contained in said real time protocol from content data; converting said timing data to adaptation information; placing said adaptation information in adaptation fields of said MPEG transport mechanism; combining said adaptation fields with corresponding content data. Mimura teaches a method of translating a data stream suitable for transmission on a IP Transport mechanism to a data stream suitable for transmission on an MPEG transport mechanism: comprising separating timing data contained in said IP transport from content data (See Col. 11 lines 23-26); converting said timing data to adaptation information (See Col. 11 lines 23-26); placing adaptation information in adaptation fields of said MPEG transport mechanism (See Col. 11 lines 23-26); combining said adaptation fields with corresponding content data (See Col. 11 lines 26-28 and Fig. 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of converting an IP transport mechanism to an MPEG transport in Son where the conversion mechanism comprises: separating timing data contained in said real time protocol from content data; converting said timing data to adaptation information; placing said adaptation information in adaptation fields of said MPEG transport mechanism; combining said adaptation fields with corresponding content data as taught by Mimura so that the method would support rapid conversion between an IP transport mechanism and a MPEG transport mechanism.

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26. Claim **16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al. in view of Hodge (U.S. 2002/0007494).

27. Regarding claim **16**, claim 16 requires the system disclosed in claim 15 further comprising: up-converter that up-converts said rf carrier signal that has been digitally modulated to a predetermined frequency channel of said cable system. Son teaches a data converter that digitally modulates a data stream onto an rf carrier signal (See Paragraph 41, QAM modulators) and delivering transmitting this digitally modulated data over a cable network (See paragraph 47). Son does not explicitly state that the data converter comprises an up-converter. However, it is well known in the art to have an up-converter that assigns digitally modulated signals to a specific rf carrier frequencies for delivery in a cable network as taught in Hodge (See Paragraph 27). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Son's data link converter to include an up-converter that up-converts said rf carrier signal that has been digitally modulated to a predetermined frequency channel of said cable system as taught by Hodge to facilitate transmission of digitally modulated signals over a cable network.

28. Claim **9** is rejected under 35 U.S.C. 103(a) as being unpatentable over Son et al and Mimura as applied to claim 8 above, and further in view of Hodge.

29. Regarding claim **9**, Son and Mimura teach multiplexing said adaptation fields and said content data on to said MPEG transport to generate an MPEG transport data stream (See Mimura Fig. 11 Col. 11 lines 19-30 and Col. 9 lines 45-48 adaptation field and content data multiplexed to PES); digitally modulating said MPEG transport data

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stream to create a digitally modulated MPEG transport data stream (See Son Paragraphs 37 and 41). Son fails to disclose up-converting said digitally modulated MPEG transport data stream to a selected frequency channel for transmission on said cable system. However, up-converting digital digitally modulated MPEG transport data stream to a selected frequency channel for transmission on said cable system is well known in the art as taught by Hodge (See Paragraph 27). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to further modify the Son and Mimura digitally modulated MPEG transport data stream so that it was up-converting said to a selected frequency channel for transmission on said cable system as taught by Hodge to facilitate transmission of digitally modulated signals over a cable network.

Conclusion

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamieson W. Fish whose telephone number is 703-305-0884. The examiner can normally be reached on 8-5.

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF 11/22/04.



NGOC-YEN VU
PRIMARY EXAMINER